

Abstract Submitted  
for the APR21 Meeting of  
The American Physical Society

**Search for Beyond Standard Model Rare Events with the Majorana Demonstrator**<sup>1</sup> CLINT WISEMAN, University of Washington, INWOOK KIM, Los Alamos National Laboratory, JOS MARIANO LPEZ-CASTAO, Oak Ridge National Laboratory, MAJORANA COLLABORATION — The MAJORANA DEMONSTRATOR is conducting a search for rare events from beyond-Standard Model physics in its low-energy region of 1–100 keV in parallel with its search for neutrinoless double beta decay. The first result used 1.3 kg-y of commissioning data to search for bosonic dark matter, solar axions, and other rare events. Since that time, up to ~50 kg-y of exposure has been collected and is being analyzed. We have significantly improved the pulse shape analysis, data cleaning, and energy threshold evaluation to achieve an analysis energy threshold of ~1 keV. The resulting energy spectra are used to conduct a search for rare peaks above background in the enriched and natural Ge detectors. In this work, we present our latest results from this updated search for bosonic dark matter and solar axions.

<sup>1</sup>This material is supported by the U.S. Department of Energy, Office of Science, Office of Nuclear Physics, the Particle Astrophysics and Nuclear Physics Programs of the National Science Foundation, and the Sanford Underground Research Facility.

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Date submitted: 08 Jan 2021

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